



UNITED STATES FORCES-IRAQ
BAGHDAD, IRAQ
APO AE 09348

20 APR 11

MEMORANDUM FOR RECORD

SUBJECT: Facility Design Standards for Iraq Foreign Military Sales (FMS)

1. The intent of these standards is to provide consistent criteria which produce simple, sustainable facilities that can be constructed with speed, are easier to maintain and generate lower lifecycle costs. These standards are within the capability of local contractors and are culturally appropriate. They are also aligned with the supply chain and can be maintained with minimal technical ability and cost. Additionally, the simplicity of the structures and utilities provides stewardship of donor nation contributions and recognition of the cost to maintain the infrastructure.
2. Exceptions to specific requirements may be made with concurrence of the FMS Infrastructure Team lead for the project in question.
3. These standards apply to all Iraqi facilities constructed with Foreign Military Sales funding. A formal review of the standards will be performed semi-annually by the FMS Infrastructure team and revisions will be made as required. Recommendations and lessons learned are encouraged from all members of the FMS Construction Team as these standards are not expected to remain static as Iraq's construction and operations and maintenance capabilities mature.
4. All questions regarding these standards should be directed to the FMS Infrastructure Team lead at DSN 318-239-5740.

ROBERT D. McMURRY
Brigadier General, US Air Force
Director, Iraq Security Assistance Mission

Enclosed
Facility Design Standards for Iraq FMS Construction

Attachment 1

SUBJECT: Construction Standards for Iraq Foreign Military Sales (FMS)
Facility Design Standards for Iraq FMS Construction

1. The International Building Code (IBC) is the governing code for all FMS construction in Iraq unless otherwise stated.
2. Requirements of UFC 4-010-01, "DoD Minimum Antiterrorism Standards for Buildings" are not applicable. However, whenever possible, installations will be constructed with 40m stand-off from perimeter walls to occupied facilities and occupied facilities will be separated by 10m.
3. No accommodations will be made for the Americans with Disabilities Act (ADA).
4. Construction firm shall provide a list of manufacturers' suggested spare parts for 12 months and specialized tools for all equipment. The end user will use the list to determine actual quantity of parts and tools to be provided by the Contractor (typically a N.T.E. CLIN).
5. All roads will follow Iraqi Roads and Bridges Council guidance.
6. Yellow brick is the preferred material to be used for masonry infill for non-load bearing walls and requires a double wythe (layer) wall section with interlocking bricks. The space between the wythes will be filled solid with grout and properly reinforced with rebar. See included masonry wall detail.
7. Proper brick construction practices shall be incorporated into the specifications.
8. Walls and roofs shall be insulated.
9. Exterior doors shall be insulated metal with metal frames; aluminum is not permitted.
10. Drywall is not to be used.
11. Floors shall be concrete or hard tile construction.
12. Fuel storage tanks will be constructed above ground and gravity fed with an integral fuel measurement system (sight glass, meter, etc.) Fuel storage tanks for generators shall be in self-venting tanks.
13. Drop ceilings will only be used in administrative buildings, medical facilities, and officer billeting.
14. Shower and toilet dividers shall extend to the floor or just above the floor, minimizing the open space between the partition and the floor.
15. Toilets shall be eastern style and shall not face directly towards or directly away from Mecca. Tanks shall be mounted securely to the wall, capable of supporting a person's weight. A spray hose will be installed with all toilets. Urinals shall not be used.
16. Use commercial / industrial hardware instead of standard faucets in latrines and at hand washing stations. Swan neck faucets shall not be used.
17. Requirements of the fire protection sections of the National Fire Protection Association (NFPA) codes and the International Building Code (IBC) are not applicable for standard construction (e.g. fire sprinklers, central alarm systems, etc.) Fire protection will be addressed via liberal use of hard-wired smoke with battery backup and A/B/C rated fire extinguishers and additional building egress in common areas. In-room smoke detectors will be wired to a common alarm in the hallway the room opens to, such that the hallway alarm sounds if the in room detector sounds. Alarm strobes will be used in hallways and large gathering areas. Pull stations will be utilized to sound a building-wide alarm bells and strobes. Facilities that house aircraft or munitions are subject to the fire protection requirements of the International Building Code (IBC).
18. Seismic requirements will be addressed in accordance with the IBC.
19. Department of Defense communications requirements are not applicable.
20. Heating and cooling will be achieved through the use of ceiling fans and ductless split units. Make-up air is not required. Central air may be used only for rooms whose shortest width is greater than 20 meters.

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21. Plumbing shall be surface mounted or installed in a utilities chase.
22. Water supply shall be gravity fed to all buildings. Buildings shall have a water storage tank on the roof. An elevated tower may be used on multi-building installations in addition to the roof tanks.
23. Conduit shall be surface mounted or installed in a utilities chase.
24. If a commercial electrical service is available nearby, or anticipated to be available in the near future, switching shall be included to allow the connection to commercial power.
25. Power distribution systems shall be designed simply, with a minimum of switching and only the most basic loop and redundancy.